Substitute for form 1448A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Application Number Filing Date First Named Inventor Group Art Unit Examiner Name	14040111201 20, 2000	RECEIVED STRAL FAX CENTER JUL 0 7 2006
Sheet 1 of 6	Attorney Docket Number	Reveo-0202USAAON00]

EXAMINER INMAL	Doc.	DOCUMENT NUMBER	DATE	Names	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
DN		4,309,225	05-Jan-82	Fan et al.	148	1.5	1
	 	4,370,176	25-Jan-83	Bruel	148	1.5	
	 	4,371,421	01-Feb-83	Fan et al.	156	624	
-		4,471,003	11-Sep-84	Cann	427	34	
-	 	4,479,846	30-Oct-84	Smith et al.	156	603	
		4,500,563	19-Feb-85	Eilenberger et al.	427	38	
_	 	4,585,945	29-Apr-86	Bruel et al.	250	492.2	
	1	4,816,420	28-Mar-89	Bozter et al.	437	2	
	1	4,837,182	06-Jun-89	Bozier et al.	437	82	
	 	4,846,931	11-Jul-89	Gmitter et al.	156	633	
	 	4,883,561	28-Nov-89	Gmitter et al.	156	633	
-	+	5,273,616	28-Dec-93	Bozler et al.	156	603	
	 	5,362,682	08-Nov-94	Bozier et al.	437	226	
	+	5,374,564	20-Dec-94	Bruel	437	24	
	 	5,453,153	26-Sep-95	Fan et al.	117	2	
	1	5,559,043	24-Sep-96	Bruel	437	424	
	┪~~~	5,588,994	31-Dec-96	Bozler et al.	117	89	
	+	5,676,752	14-Oct-97	Bozler et al.	117	89	
	+	5,710,057	20-Jan-98	Kenney	437	62	
	+	5,714,395	03-Feb-98	Bruel	437	24	
	 	5,793,115	11-Aug-98	Zavracky et al.	257	777	
	+	5,845,123	01-Dec-98	Johnson et al.	395	377	
	+	5,877,070	02-Mar-99	Goesele et al.	438	458	
\dashv		5,882,987	16-Mar-99	Srikrishnan	438	458	
		5,897,939	27-Apr-99	Deleonibus	428	195	
	+	5,909,627	01-Jun-99	Ealoff	438	406	
	 	5,920,764	06-Jul-99	Hanson et al.	438	4	
	+	5,933,750	03-Aug-99	Wilson et al.	438	455	
	- 	5,976,953	02-Nov-99	Zavracky et al.	438	455	7
	 	5,985,688	16-Nov-99	Bruel	438	53	7
	 	5,993,677	30-Nov-99	Biasse et al.	216	36	
	+	5,994,207	30-Nov-99	Henley et al.	438	515	
_		6,020,252	01-Feb-00	Aspar et al.	438	458	
	+	6,027,988	22-Feb-00	Cheung et al.	483	513	
-+	┪	6,033,974	07-Mar-00	Henley et al.	438	526	
		6,054,363	25-Apr-00	Sakaguchi et al.	438	406	
		6,054,370	25-Apr-00	Doyle	438	456	
-	\top	6,059,877	09-May-00	Bruel	117	35	
		6,071,795	08-Jun-00	Cheung et al.	438	458	
	1	6,103,597	15-Aug-00	Aspar et al.	438	458	
DN	+	6,137,110	24-Oct-00	Pellin et al.	250	423	1

Examiner	/Dao Nguyen/	Date	08/28/2006
Signature	, 2 do 1.9 d j 0.1./	Considered	

	1		1
Substitute for form 1449A/PTO	Application Number	10/719,663	
INFORMATION DISCLOSURE	Filing Date	November 20, 2003	RECEIVED
STATEMENT BY APPLICANT	First Named Inventor	Faris es	NTRAL PAX CENTER
STATEMENT DI AFFEIDAM	Group Art Unit	2818 GE	MILIAP NAW ARIA I PL
	Examiner Name	Nguyen, Dao H	JUL 0.7 2006
Sheet 2 of 6	Attorney Docket Number	Reveo-0202USAAON00	

		Ę	J.S. PATE	NT DOCUMEN	ITS		
EXAMINER INITIAL	Doc. No.	DOCUMENT NUMBER	DATE	Name	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
DN		6,148,979	14-Nov-00	Henley et al.	438	458	1
1		6,155,909	05-Dec-00	Henley et al.	451	39	
		6,159,323	12-Dec-00	Joly et al.	156	241	
		6,159,824	12-Dec-00	Henley et al.	438	455	
		6,159,825	12-Dec-00	Henley et al.	438	460	
		6,162,705	19-Dec-00	Henley et al.	438	478	
	1	6,184,060	06-Feb-01	Siniaguine	438	106	
	t	6,184,111	06-Feb-01	Henley et al.	438	514	
\neg		6,187,110	13-Feb-01	Henley et al.	148	33.2	
		6,190,937	20-Feb-01	Nakagawa et al.	438	67	
		6,190,998	20-Feb-01	Bruel et al.	438	407	
		6,191,007	20-Feb-01	Matsui et al.	438	459	
	1	6,204,151	20-Mar-01	Malik et al.	438	460	
		6,214,733	10-Apr-01	Sickmiller	438	691	
<u> </u>	1	6,221,738	24-Apr-01	Sakaguchi et al.	438	455	
	1	6,221,740	24-Арг-01	Bryan et al.	438	458	
	+	6,221,774	24-Apr-01	Malik	438	690	
	1	6,225,190	01-May-00	Bruel et al.	438	458	
	 	6,225,192	01-May-00	Aspar et al.	438	460	
+	 	6,232,136	15-May-01	Zavracky et al.	438	30	
-1	1	6,387,736	May 2002	Cao et al.	438	149	
DN	 	6,309,945	Oct 2001	Sato	437	409	
	+	 	 		 		1
	╁		1	1			
	+						
		1					
	1						
	1				T .	T.	
	1						
	\top						
	+-	1					
	1	1					
	1	1					
	1						
	1		1				
	1	 	 		T		
	+ -			1			
		 	 	 		T	
	4-					· · · · · · · · · · · · · · · · · · ·	

Examiner	/Dao Nguyen/	Date	08/28/2006
Signature	, = = = = = = = = = = = = = = = = = = =	Considered	• •

	1		ŀ
Substitute for form 1449A/PTO	Application Number	10/719,663	RECEIVED
INFORMATION DISCLOSURE	Fiting Date	November 20, 2003 C	ENTRAL FAX CENTER
STATEMENT BY APPLICANT	First Named Inventor	Faris	11.11 0 - 0000
STATEMENT BY AT EIGHT	Group Art Unit	2818	JUL 0.7 2006
	Examiner Name	Nguyen, Dao H	
Sheet 3 of 6	Attorney Docket Number	Reveo-0202USAAON00	

	FORE	GN PATEN	IT DOCUM	IENTS	,		
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO
DN	EP0355913A1	28-Feb-90	Europe				
Ti Ti	WO 95/20824A1	3-Aug-95	PCT	T			
	WO 98/20543A2	14-May-98	PCT				
	WO 98/33209	30-Jul-98	PCT				
	WO 99/05711A1	4-Feb-99	PCT				
	WO 99/08316A1	18-Feb-99	PCT				
	WO 99/35674A1	15-Jul-99	PCT				
	WO 99/39377A1	5-Aug-99	PCT			\Box	1
_11	WO 99/66559A1	23-Dec-99	PCT				
	WO 00/03429A1	20-Jan-00	PÇT			П	
	WO 00/24059A1	27-Apr-00	PCT				
	WO 00/24054A1	27-Apr-00	PCT				
	WO 00/46847A1	10-Aug-00	PCT	777			
	WO 00/48238A1	17-Aug-00	PCT				
	EP01045448A1	18-Oct-00	Europe				
	WO 00/75995A1	14-Dec-00	PCT			1 1	T
- 1	WO 00/75968A1	14-Dec-00	PCT				
- - 	WO 01/03172A1	11-Jan-01	PCT				
	WO 01/03171A1	11-Jan-01	PCT	\top	-		
- 	JP 63-155731	Jun 1988	JP				X
1	0938129	25-08-1999	EP				T
1	2771852	04-06-1999	FR	\top			
_	0793263	03-09-1997	EP				
DN	2758907	31-07-1998	FR	777			

OTHE	R DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
DN	Miller, D.L., et. al., "GaAs Peeled Film Solar Cells," Rockwell International, pp. 1-45, March 15, 1980-Dec. 31, 1981
	Fan, J.C.C., "Thin Films of III-V Compounds and Their Applications," Journal de Physique, 43, pp. C1-327, (1982)
	Konagai, Makoto, et al., "High Efficiency GaAs Thin Film Solar Cells by Peeled Film Technology", Journal of Crystal Growth, vol. 45, pp. 277-280, 1978
	Bower, R.W., et al., "Aligned Wafer Bonding: A Key to Three Dimensional Microstructures," Journal of Electronic Materials, Vol. 20, No. 5, pp. 383-387, 1991
	Lee, K.Y., et al., "Fabrication of Ultrasmall Devices on Thin Activ GaAs Membranes," J. Vac. Sci. Technol.B5 (1), pp. 322-325, 1987
	Camperi-Ginestet, C., "Alignable Epitaxial Liftoff of GaAs Materials With Selective Deposition Using Polyimide Diaphragms," IEEE Transactions Photonics Technology Letters, pp. 1123-1126, Dec. 12, 1991
DN	Hargis, M.C., et al., "Epitaxial Lift-Off GaAS/Al GaAs Metal - Semiconductor-Metal Photodetectors with Back Passivaton," IEEE Photonics Technology Letters, Vol. 5, No. 10, pp. 1210-1212, 1993

Examiner Signature	/Dao Nguyen/	Date Considered	08/28/2006

1		1		1
	Substitute for form 1449APTO	Application Number	10/719,663]
	INFORMATION DISCLOSURE	Filing Date	November 20, 2003] regeived
	STATEMENT BY APPLICANT	First Named Inventor	Faris Al	ENTRAL FAX CENTER
	STATEMENT DI AFFEIOANT	Group Art Unit	2818	
		Examiner Name	Nguyen, Dao H]JUL 0 7 2006
	Sheet 4 of 6	Attorney Docket Number	Reveo-0202USAAON00	_

DN	Schnitzer, L., et al., "Ultra-High Efficiency Light-Emitting-Diode Arrays," IEEE
	Transactions on Electron Devices, Vol. 40, No. 11, pp. 2108-2109, Nov. 1993
	Zhang, L., et. al., "Low-energy Separation By Implantation of Oxygen Structures Via
1 1	Plasma Source Ion Implantation," Applied Physics Lett., Vol. 65, No. 8, pp. 962-964,
	Aug. 22, 1994
	Bengtsson, S., et al., "Silicon on Aluminum Nitride Structures Formed by Wafer
	Bonding," Proceedings IEEE International SOI Conference, pp. 35 - 36, Oct. 1994
	Zahraman, K., et al., "Epitaxial Lift-Off in Photovoltaics: Ultra Thin Al0.2Ga0.8AsCel
	in a Mechanically Stacked (AL, Ga)As/Si Tandem," First WCPEC, pp. 1898- 1901, Dec
	5-9 1994
	Young, Paul G, et al., "RF Control of Epitaxial Lift-Off PHEMT's Under Backside
1 1	Illumination," IEEE Journal of Quantum Electronics, Vol. 30, No. 8, pp. 1782-1786,
	Aug. 1994
	Hageman, P.R., et al., "Re-use of GAAS Substrates for Epitaxial Lift-Off III-V Solar
	Ceils," IEEE, pp. 1910-1913, 1994
	Wilkinson, Scott T., et al., "Integration of Thin Film Optoelectronic Devices onto
	Micromachined Movable Platforms," IEEE Photonics Technology Letters, Vol. 6, No.
	1115-1118, Sept. 1994
_	Callahan, J., et al., "Alignable Lift-Off Transfer of Device Arrays Via A Single
	Polymeric Carrier Membrane," IEEE, pp.1274 - 1277, 1995
	Spiering, Vincent L., et al., "Sacrificial Wafer Bonding for Planarization After Very
	Deep Etching," Journal of Microelectromechanical Systems, Vol. 4, No. 3, pp. 151-157
	Sept. 1995
	Bhattacharya, D., et al., "Optical Mixing in Epitaxial Lift-Off Pseudomorphic HEMTs
	IEEE Photonics Technology Letters, Vol. 7, No. 10, pp. 1171-1173, Oct. 1995
	Hohkawa, K., et al., "Fabricatoin of Surface Acoustic Wave Semiconductor Coupled
	Devices Using Epitaxial Lift-off Technology," IEBE Ultrasonics Symposium, pp.401-
	404, 1995
	Fan, J.C., et al., "AlGAAs/GaAs Heterojunction Bipolar Transistors on Si Substrate
1	Using Epitaxial Lift-Off," IEEE Electron Device Letters, Vol. 16, No. 9, pp. 393-395,
	Sept. 1995
	Shah, Divyang M., et al., "Epitaxial Lift-Off GaAs HEMTs," IEEE Transactions on
	Electron Devices, Vol. 42, No. 11, pp. 1877-1881, Nov. 1995
	Morf, T., et al., Integrating Optical Receiver Transplanted by Epitaxial Lift Off," IFFE
	pp. 189-192, 1995
	Herrscher, M., "Epitaxial Liftoff In GaAs/InP MSM Photodetectors on Si," Electronics
L	Letters, Vol. 31, No. 16, pp. 1383-1384, Aug. 3. 1995
	Omnes, et al., "Substrate Free GaAs Photovoltaic Cells on Pd-Coated Silicon with a 20
1	AM1.5 Efficiency," IEEE Transactions on Electron Devices, Vol. 43, No. 11, pp. 1800
	1811 (Nov. 1996)
	Jokerst. N.M., et al., "Thin-Film Multimaterial Optoelectronic Integrated Circuits," IE
	Transactions on Components, Packaging, and Manufacturing Technology - Part B, Vo
	19, No. 1, pp.97-105, Feb. 1996
1	Tong, Q.Y., et al., "Feasiblity Study of VLSI Device Layer Transfer by CMP PETEO: Direct Bonding," Proceedings 1996 IEEE International SOI Conference, pp. 36-37, O.
	I Note to Describe a Describe of 1000 IEEE International SOI Conference on 36-37 O

Examiner Signature	/Dao Nguyen/	Date Considered	08/28/2006

		İ		_
	Substitute for form 1449A/PTO	Application Number	10/719,663	BEAEIL/ED
1	INFORMATION DISCLOSURE	Filing Date	November 20, 2003	PEGEIVED.
STATEMENT BY APPLICANT	First Named Inventor	Faris	ENTRAL FAX CENTER	
	STATEMENT BY AFFEIGANT	Group Art Unit	2818	JUL 0 7 2006
		Examiner Name	Nguyen, Dao H]טטב טין צטטס
	Sheet 5 of 6	Attorney Docket Number	Reveo-0202USAAON00	

DN	Doble, G. Rainer, et al., "A New Bonding Technique for Microwave Devices," IEEE
DN	Transactions on Components, Packaging, and Manufacturing Technology - Part B, Vol.
1 }	19, No. 1, pp. 57-63, Feb. 1996
\neg	Yazawa, Y., et al., "Three-Junction Solar Cells Comprised of a Thin-Film GainP/GaAs
	Tandem Cell Mechanically Stacked on a Si Cell," IEEE, pp. 899-902, Sept. 30 - Oct. 3,
	1997
	Yablonovitch, E., et al., "Extreme Selectivity in the Lift-Off of Epitaxial GaAs Films",
1 1	Appl. Phys. Lett., 51 (26), pp. 2222-2224, Dec. 28, 1997
	Chun, Carl, et al., "Integrated 1.55 um Receivers Using GaAs MMICS and Thin Film
i i	InP Detectors," IEEE, pp. 47-50, 1998
	Yun, C.H., et al., "Transfer of Patterned Ion-Cut Silicon Layers," Applied Physics Lett.,
	Vol. 73, No. 19, pp. 2772-2774, Nov. 9, 1998
	Geppert, Linda, "Solid State," IEEE Spectrum, pp. 52-56, Jan. 1999
_	Pasquareillo, D. et al., "Mesa-Spacers: Enabling Non-Destructive Measurements of
	Surface Energy in Room Temperature Wafer Bonding," as published in Semiconductor
	Wafer Bonding: Science, Technology and Applications, Electrochemical Society
	Proceedings, Vol. 99-35, pp. 110-118, Fall 1999
1	Bagdahn, J. et al., "Lifetime Properties of Wafer-Bonded Components Under Static and
- 1 - 1	Cyclic Loading," as published in Semiconductor Wafer Bonding: Science, Technology
	and Applications,
	Electrochemical Society Proceeding, Vol. 99-35, pp. 129-135, Fall 1999
_	Beggans, M., et al., "Oxidation Effect on Microcontamination and Bondability of
	Ultrathin Silicon Wafers," as published in Semiconductor Wafer Bonding: Science,
	Technology, and Applications, Electrochemical Society Proceeding, Vol. 99-35, pp. 13
	145, Fall 1999
_	Pasquariello, D., et al., "Oxidation and Induced Damages in Oxygen Plasma In-Situ
	Wafer Bonding," as published in Semiconductor Wafer Bonding: Science, Technology,
	and Applications, Electrochemical Society Proceedings, Vol. 99-35, pp. 169-177, Fall
	1999
	Bagdahn, J. et al., "Measurement of the Local Strength Distribution of Directly Bondec
	Silicon Wafers Using the Micro-Chevron-Test, as published in Semiconductor Wafer
-	Bonding: Science, Technology, and Applications, Electrochemical Society Proceeding
ŀ	Vol. 99-35, pp. 218-231, Fall 1999
	Andreas, P. et al., "Room Temperature Covalent Bonding: Effect on Interfacial
l	Properties," as published in Semiconductor Wafer Bonding: Science, Technology, and
ı	Applications, Electrochemical Society Proceedings, Vol. 99-35, pp. 232-243, Fall 1995
	Kopper-Schmidt, P., et al., "Recent Developments in Adhesion-Enhanced High-Vacuu
	Bonding By In Situ Plasma Surface Precleaning," as published in Semiconductor Wafe
	Bonding: Science, Technology, and Applications, Electrochmeical Society Proceeding
	Vol. 99-35, pp. 259-273, Fall 1999
	Krauter, G. et al., "Interface Chemistry of Tailor-Made Monolayers for Low-
-	Temperature Wafer Bonding," as published in Semiconductor Wafer Bonding: Science
DN	Technology, and Applications, "Electrochemical Society Proceedings, Vol. 99-35, pp.
	275-281, Fall 1999

		<u> </u>	
I Examiner	,_ ,	Date	00/20/2006
Signatura	/Dao Nguyen/	Considered	08/28/2006
Signature		Considered	

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Application Number Filing Date First Named Inventor	10/719,663 November 20, 2003 Farls	RECEIVED CENTRAL FAX CENTER
STATEMENT BY AFFEIGANT	Group Art Unit	2818	JUL 0 7 2006
	Examiner Name	Nguyen, Dao H	
Sheet 6 of 6	Altorney Docket Number	Reveo-0202USAAON00	

	Wiegand, M. et al., "Effect of O2 Plasma Pretreatment on the Bonding Behavior of
DN	Silicon (100) Wafers," as published in Semiconductor Wafer Bonding: Science,
	Technology, and Applications, Electrochemical Society Proceedings, Vol. 99-35, pp.
	282-291, Fall 1999
1 1	Reiche, M. et al., "Plasma Activation for Low-Temperature Wafer Direct Bonding," as
	published in Semiconductor Wafer Bonding: Science, Technology, and Applications,
1 1	Electrochemical Society Proceeding, Vol. 99-35, pp. 292-325, Fall 1999
	Tong, Q.T., "Wafer Bonding and Layer Transfer for Microsystems: An Overview," as
	published in Semiconductor Wafer Bonding: Science, Technology, and Applications,
	Electrochemical Society Proceedings, Vol. 99-35, pp. 1-39, Fall 1999
	Reiche, M. et al., "Bonding Behaviour of Different Interfacial Layers," as published in
1 1	Semiconductor Wafer Bonding: Science, Technology, and Applications, Electrochemics
1 1	Society Proceedings, Vol. 99-35, pp. 100-105
	Labossiere, et al., "Characterization of Wafer Bond Toughness," as published in
	Semiconductor Wafer Bonding: Science, Technology, and Applications, Electrochemics
	Society Proceedings, Vol. 99-35, pp. 338-349, Fall 1999
	Syms, R.R.A. et al., "3-D Self Assembly of Opto-Mechanical Structures Using Bonded
	Silicon-on-Insulator," as published in Semiconductor Wafer Bonding: Science,
1 1	Technology, and Applications, Electrochemical Society Proceedings, Vol. 99-35, pp.
1 1	110-118, Fall 1999
	Chu, Paul K. et al., "Microcavities Formed by Hydrogen or Helium Plasma Immersion
	Ion Implication," IEEE, pp. 1238-1241
	King, Tsu-Jae, "Poly-Si TFTs for Plastic Substrates," Information Display, pp. 24-26,
	April 2001
	Williams, David, et al., "Microsystems Mature," Spie's Magazine, pp. 27-29, May 2001
	Marcinkevicius, Andrius et al., "Femtosecond Laser-Assisted Three-Dimensional
	Microfabrication in Silica, Optics Letters, Vol. 26, No. 5, pp. 277-279, March 1, 2001
	Jokerst, N.M., "Epitaxial Liftoff of GaAs Detectors Onto Silicon Integrated Circuits," p
	664 – 665
	Tong, Q-Y., et al., "Wafer Bonding of Si With Dissimilar Materials," pp. 524 - 526
	Basco, Ricardo, et al., "Monolithic Integration of a 94GHz AlGAAs/GaAs 2 DEG Mix
	on Quartz Substrate by Epitaxial Lift-Off," Department of Electrical and Computer
	Engineering University of Massachusetts, Amherst MA, pp. 38-39 (that is the only info
	Akatsu T., et al., "Wafer Bonding of Compoun Semiconductors Using Atomic
	Hydrogen," Electrochemical Society Proceedings, Vol. 99-35, pp. 60-419
	Schaffer, Chris B., et al., "Micromachining Using Ultrashort Pulses From a Laser
	Oscillator,"
	Huang, L-J., et al., "Critical Bonding Energy Required for Hydrogen-Implantation
1 1	Induced Layer Splitting, "Electrochemical Society Proceedings, Vol. 99-35, pp. 68-77,
	Klem, J.F., et al., "Characteristics of Lift-Off Fabricated A1GaAs/InGaAs Single-
	Strained-Quantum-Well Structures on Glass and Silicon Substrates,"
	International Search Report Dated 06/10/03 for PCT/US0215864
	"Selective Wafer Bonding by Surface Roughness Control" by C. Gui, et al. published
DN	Journal of the Electrochemical Society, 148 (4) G225-G228 2001 pp. G225-G228

Examiner	/Dao Nguyen/	Date	08/28/2006
Signature	, , ,	Considered	l